## **Amendments To The Claims**

1. (Currently amended) A-eCompounds of formula I:

wherein:

- (a) R1 is selected from the group consisting of:
  - (1) lower alkyl,
  - (2) lower alkyl substituted by phenyl and
  - (3) lower alkyl substituted by halogen substituted phenyl;
- (b) R<sup>2</sup> is selected from the group consisting of:
  - (1) lower alkyl and
  - (2) lower alkyl substituted by lower cycloalkyl;
- (c) R<sup>3</sup> is selected from the group consisting of:

- (d)  $R^4$  is selected from the group consisting of H and lower alkyl;
- (e) R<sup>5</sup> is selected from the group consisting of:
  - (1) lower alkyl,
  - (2) amino lower alkyl,
  - (3) lower alkyl substituted by phenyl,
  - (4) lower alkenyl substituted by phenyl,

## (5) phenyl,

- (6) phenyl substituted by at least one substituent selected from the group consisting of lower alkyl, lower alkyl substituted by halogen, halogen, lower alkoxy, lower alkoxy substituted by halogen, nitro and acetamido,
- (7) a 5-membered heteroaromatic ring having one heteroatom independently selected from the group consisting of N, O and S, the 5-membered heteroaromatic ring being unsubstituted or substituted by at least one substituent selected from the group consisting of lower alkyl, halogen, carboxy lower alkyl, amino, alkyl amino and acetamido,
- (8) a 5-membered heteroaromatic ring having two heteroatoms wherein a first heteroatom is N and a second heteroatom is independently selected from the group consisting of N, O and S, the 5-membered heteroaromatic ring being unsubstituted or substituted by at least one substituent selected from the group consisting of lower alkyl, halogen, carboxy lower alkyl, amino, alkyl amino and acetamido,
- (9) a 6-membered heteroaromatic ring having one N, the 6-membered heteroaromatic ring being unsubstituted or substituted by at least one substituent selected from the group consisting of lower alkyl, halogen, carboxy lower alkyl, amino, alkyl amino and acetamido,

(10)



wherein Ar is selected from the group consisting of:

- (A) a 5-membered heteroaromatic ring fused to the 6-membered ring, having one, two, or three heteroatoms, and wherein a first heteroatom is N, a second heteroatom is N and a third heteroatom is selected from the group consisting of O and S,
- (B) a 6-membered aromatic ring fused to the 6-membered ring, having no or one N heteroatoms, the fused 6-membered aromatic ring being

unsubstituted or substituted by at least one substituent selected from the group consisting of lower alkyl, halogen, carboxy lower alkyl, amino, alkyl amino and acetamido; and

(f) R<sup>6</sup> is selected from the group consisting of:

(1) H,

- (2) a 5-membered aromatic heterocyclic ring with one or two heteroatoms wherein a first heteroatom is N and a second heteroatom is selected from the group consisting of N and S, the 5-membered heterocyclic ring being unsubstituted or substituted by at least one substituent selected from the group consisting of lower alkyl, halogen, carboxy lower alkyl, amino, alkyl amino and acetamido, and
- (3) a 6-membered aromatic heterocyclic ring with one or two N heteroatoms, the 6-membered heterocyclic ring being unsubstituted or substituted by at least one substituent selected from the group consisting of lower alkyl, halogen, carboxy lower alkyl, amino, alkyl amino and acetamido[,];

or [a] pharmaceutically acceptable salts or prodrugs thereof.

- 2. (Currently amended) The compounds of formula I according to claim 1 wherein  $R^1$  is lower alkyl.
- 3. (Currently amended) The compounds of formula I according to claim 2 wherein  $\mathbb{R}^2$  is lower alkyl.
- 4. (Currently amended) The A compound of formula I according to claim 13 selected from the group consisting of:
  - 1,3-dimethyl-1*H*-pyrazole-4-sulfonic acid [4-(1,3-dimethyl-2,6-dioxo-2,3,6,7-tetrahydro-1*H*-purin-8-ylmethyl)-phenyl]-amide; and
  - 5-chloro-1,3-dimethyl-1*H*-pyrazole-4-sulfonic acid {4-[1,3-dimethyl-2,6-dioxo-2,3,6,7-tetrahydro-1*H*-purin-8-ylmethyl]-phenyl}-amide.

5. (Currently amended) The compounds of formula I according to claim 1 wherein  $R^1$  is lower alkyl substituted by phenyl.

- 6. (Currently amended) The compounds of formula I according to claim 5 wherein  $\mathbb{R}^2$  is lower alkyl.
- 7. (Currently amended) The A compound of formula I according to claim 16 wherein the compound is selected from the group consisting of:

4-(1-benzyl-3-butyl-2,6-dioxo-2,3,6,7-tetrahydro-1*H*-purin-8-ylmethyl)-benzenesulfonamide;

*N*-[4-(1-benzyl-3-butyl-2,6-dioxo-2,3,6,7-tetrahydro-1*H*-purin-8-ylmethyl)-phenyl]-4-methyl-benzenesulfonamide; and

*N*-[4-(1-benzyl-3-butyl-2,6-dioxo-2,3,6,7-tetrahydro-1*H*-purin-8-ylmethyl)-phenyl]-methanesulfonamide.

8. (Currently amended) The compounds of formula I according to claim 1 having the formula:

$$\begin{array}{c|c}
F & O \\
N & N
\end{array}$$

$$\begin{array}{c|c}
R3 \\
IA.$$

- 9. (Currently amended) The compounds of formula IA according to claim 8 wherein  $R^2$  is lower alkyl.
- 10. (Currently amended) The compounds of formula IA according to claim 9 wherein R<sup>2</sup> is n-butyl.
- 11. (Currently amended) The compounds of formula IA according to claim 10 wherein:  $\mathbb{R}^3$  is

$$\begin{array}{c|c}
R^4 & 0 \\
 & \parallel \\
N-S-R^5 \\
0
\end{array}$$

- 12. (Currently amended) The compounds of formula IA according to claim 11 wherein  $\mathbb{R}^4$  is H.
- 13. (Currently amended) The compounds of formula IA according to claim 12 wherein R<sup>5</sup> is a 5-membered heteroaromatic ring having one heteroatom independently selected from the group consisting of N, O and S, the 5-membered heteroaromatic ring being unsubstituted or substituted by at least one substituent selected from the group consisting of lower alkyl, halogen, carboxy lower alkyl, amino, alkyl amino and acetamido.
- 14. (Currently amended) The  $\underline{A}$  compound of formula IA according to claim  $\underline{113}$  selected from the group consisting of:

thiophene-2-sulfonic acid {4-[3-butyl-1-(2-fluoro-benzyl)-2,6-dioxo-2,3,6,7-tetrahydro-1*H*-purin-8-ylmethyl]-phenyl}-amide;

5-chlorothiophene-2-sulfonic acid {4-[3-butyl-1-(2-fluoro-benzyl)-2,6-dioxo-2,3,6,7-tetrahydro-1*H*-purin-8-ylmethyl]-phenyl}-amide;

3-{4-[3-butyl-1-(2-fluoro-benzyl)-2,6-dioxo-2,3,6,7-tetrahydro-1*H*-purin-8-ylmethyl]-phenylsulfamoyl}-thiophene-2-carboxylic acid methyl ester;

4,5-dibromothiophene-2-sulfonic acid {4-[3-butyl-1-(2-fluoro-benzyl)-2,6-dioxo-2,3,6,7-tetrahydro-1*H*-purin-8-ylmethyl]-phenyl}-amide; and

5-bromo-thiophene-2-sulfonic acid {4-[3-butyl-1-(2-fluoro-benzyl)-2,6-dioxo-2,3,6,7-tetrahydro-1*H*-purin-8-ylmethyl]-phenyl}-amide.

15. (Currently amended) The compounds of formula IA according to claim 12 wherein R<sup>5</sup> is a 5-membered heteroaromatic ring having two heteroatoms wherein a first heteroatom is N and a second heteroatom is independently selected from the group consisting of N, O and S, the 5-membered heteroaromatic ring being unsubstituted or substituted by at least one substituent

selected from the group consisting of lower alkyl, halogen, carboxy lower alkyl, amino, alkyl amino and acetamido.

16. (Currently amended) The A compound of formula IA according to claim 115 wherein the compound is selected from the group consisting of:

1-Methyl-1*H*-imidazole-4-sulfonic acid {4-[3-butyl-1-(2-fluoro-benzyl)-2,6-dioxo-2,3,6,7-tetrahydro-1*H*-purin-8-ylmethyl]-phenyl}-amide trifluoroacetic acid salt; and 5-chloro-1,3-dimethyl-1*H*-pyrazole-4-sulfonic acid {4-[3-butyl-1-(2-fluoro-benzyl)-2,6-dioxo-2,3,6,7-tetrahydro-1*H*-purin-8-ylmethyl]-phenyl}-amide.

- 17. (Currently amended) The compounds of formula IA according to claim 12 wherein R<sup>5</sup> is a 6-membered heteroaromatic ring having one N, the 6-membered heteroaromatic ring being unsubstituted or substituted by at least one substituent selected from the group consisting of lower alkyl, halogen, carboxy lower alkyl, amino, alkyl amino and acetamido.
- 18. (Currently amended) The A compound of formula IA according to claim 117 wherein the compound is 6-chloro-pyridine-3-sulfonic acid {4-[3-butyl-1-(2-fluoro-benzyl)-2,6-dioxo-2,3,6,7-tetrahydro-1*H*-purin-8-ylmethyl]-phenyl}-amide.
- 19. (Currently amended) The compounds of formula IA according to claim 12 wherein  $R^5$  is:



where Ar is selected from the group consisting of:

(A) a 5-membered heteroaromatic ring fused to the 6-membered ring, having one, two, or three heteroatoms, and wherein a first heteroatom is N, a second heteroatom is N and a third heteroatom is selected from the group consisting of O and S, and

(B) a 6-membered aromatic ring fused to the 6-membered ring, having no or one N heteroatoms, the fused 6-membered aromatic ring being unsubstituted or substituted by at least one substituent selected from the group consisting of lower alkyl, halogen, carboxy lower alkyl, amino, alkyl amino and acetamido.

20. (Currently amended) The A compound of formula IA according to claim 119 wherein the compound is selected from the group consisting of:

*N*-{4-[3-butyl-1-(2-fluoro-benzyl)-2,6-dioxo-2,3,6,7-tetrahydro-1*H*-purin-8-ylmethyl]-phenyl}-1-naphthalenesulfonamide;

5-dimethylamino-naphthalene-1-sulfonic acid {4-[3-butyl-1-(2-fluoro-benzyl)-2,6-dioxo-

2,3,6,7-tetrahydro-1*H*-purin-8-ylmethyl]-phenyl}-amide;

benzo[1,2,5]thiadiazole-4-sulfonic acid {4-[3-butyl-1-(2-fluoro-benzyl)-2,6-dioxo-

2,3,6,7-tetrahydro-1*H*-purin-8-ylmethyl]-phenyl}-amide; and

benzo[1,2,5]oxadiazole-4-sulfonic acid {4-[3-butyl-1-(2-fluoro-benzyl)-2,6-dioxo-

2,3,6,7-tetrahydro-1*H*-purin-8-ylmethyl]-phenyl}-amide.

- 21. (Currently amended) The compounds of formula IA according to claim 12 wherein R<sup>5</sup> is lower alkyl or lower alkyl substituted by phenyl.
- 22. (Currently amended) The A compound of formula IA according to claim 121 wherein the compound is selected from the group consisting of:

propane-2-sulfonic acid {4-[3-butyl-1-(2-fluoro-benzyl)-2,6-dioxo-2,3,6,7-tetrahydro-

1*H*-purin-8-ylmethyl]-phenyl}-amide;

 $N-\{4-[3-butyl-1-(2-fluoro-benzyl)-2,6-dioxo-2,3,6,7-tetrahydro-1H-purin-8-ylmethyl]-1-(2-fluoro-benzyl)-2,6-dioxo-2,3,6,7-tetrahydro-1H-purin-8-ylmethyl]-1-(2-fluoro-benzyl)-2,6-dioxo-2,3,6,7-tetrahydro-1H-purin-8-ylmethyl]-1-(2-fluoro-benzyl)-2,6-dioxo-2,3,6,7-tetrahydro-1H-purin-8-ylmethyl]-1-(2-fluoro-benzyl)-2,6-dioxo-2,3,6,7-tetrahydro-1H-purin-8-ylmethyl]-1-(2-fluoro-benzyl)-2,6-dioxo-2,3,6,7-tetrahydro-1H-purin-8-ylmethyl]-1-(2-fluoro-benzyl)-2,6-dioxo-2,3,6,7-tetrahydro-1H-purin-8-ylmethyl]-1-(2-fluoro-benzyl)-$ 

 $phenyl\}-C-phenyl-methane sulfon a mide; and$ 

ethanesulfonic acid  $\{4-[3-butyl-1-(2-fluoro-benzyl)-2,6-dioxo-2,3,6,7-tetrahydro-1\mathit{H-}1-(2-fluoro-benzyl)-2,6-dioxo-2,3,6,7-tetrahydro-1\mathit{H-}1-(2-fluoro-benzyl)-2,6-dioxo-2,3,6,7-tetrahydro-1\mathit{H-}1-(2-fluoro-benzyl)-2,6-dioxo-2,3,6,7-tetrahydro-1\mathit{H-}1-(2-fluoro-benzyl)-2,6-dioxo-2,3,6,7-tetrahydro-1\mathit{H-}1-(2-fluoro-benzyl)-2,6-dioxo-2,3,6,7-tetrahydro-1\mathit{H-}1-(2-fluoro-benzyl)-2,6-dioxo-2,3,6,7-tetrahydro-1\mathit{H-}1-(2-fluoro-benzyl)-2,6-dioxo-2,3,6,7-tetrahydro-1\mathit{H-}1-(2-fluoro-benzyl)-2,6-dioxo-2,3,6,7-tetrahydro-1\mathit{H-}1-(2-fluoro-benzyl)-2,6-dioxo-2,3,6,7-tetrahydro-1\mathit{H-}1-(2-fluoro-benzyl)-2,6-dioxo-2,3,6,7-tetrahydro-1\mathit{H-}1-(2-fluoro-benzyl)-2,6-dioxo-2,3,6,7-tetrahydro-1\mathit{H-}1-(2-fluoro-benzyl)-2,6-dioxo-2,3,6,7-tetrahydro-1\mathit{H-}1-(2-fluoro-benzyl)-2,6-dioxo-2,3,6,7-tetrahydro-1\mathit{H-}1-(2-fluoro-benzyl)-2,6-dioxo-2,3,6,7-tetrahydro-1\mathit{H-}1-(2-fluoro-benzyl)-2,6-dioxo-2,3,6,7-tetrahydro-1\mathit{H-}1-(2-fluoro-benzyl)-2,6-dioxo-2,3,6,7-tetrahydro-1\mathit{H-}1-(2-fluoro-benzyl)-2,6-dioxo-2,3,6,7-tetrahydro-1\mathit{H-}1-(2-fluoro-benzyl)-2,6-dioxo-2,$ 

purin-8-ylmethyl]-phenyl}-amide.

- 23. (Currently amended) The compounds of formula IA according to claim 12 wherein R<sup>5</sup> is lower alkenyl substituted by phenyl.
- 24. (Currently amended) The A compound of formula IA according to claim 123 wherein the compound is 2-phenyl-ethenesulfonic acid {4-[3-butyl-1-(2-fluoro-benzyl)-2,6-dioxo-2,3,6,7-tetrahydro-1*H*-purin-8-ylmethyl]-phenyl}-amide.
- 25. (Currently amended) The compounds of formula IA according to claim 12 wherein  $R^5$  is phenyl.
- 26. (Currently amended) The  $\underline{A}$  compound of formula IA according to claim  $\underline{125}$  wherein the compound is  $N-\{4-[3-butyl-1-(2-fluoro-benzyl)-2,6-dioxo-2,3,6,7-tetrahydro-1<math>H$ -purin-8-ylmethyl]-phenyl}-benzenesulfonamide.
- 27. (Currently amended) The compounds of formula IA according to claim 12 wherein R<sup>5</sup> is phenyl substituted by at least one substituent selected from the group consisting of lower alkyl, lower alkyl substituted by halogen, halogen, lower alkoxy, lower alkoxy substituted by halogen, nitro and acetamido.
- 28. (Currently amended) The compounds of claim 27 wherein the phenyl group has one substituent selected from the group consisting of lower alkyl, lower alkyl substituted by halogen, halogen, lower alkoxy, lower alkoxy substituted by halogen, nitro and acetamido.
- 29. (Currently amended) The compounds of formula IA according to claim 28 wherein the one substituent is halogen.
- 30. (Currently amended) The A compound of formula IA according to claim 129 wherein the compound is selected from the group consisting of:
  - *N*-{4-[3-butyl-1-(2-fluoro-benzyl)-2,6-dioxo-2,3,6,7-tetrahydro-1*H*-purin-8-ylmethyl]-phenyl}-4-chloro-benzenesulfonamide;

- *N*-{4-[3-butyl-1-(2-fluoro-benzyl)-2,6-dioxo-2,3,6,7-tetrahydro-1*H*-purin-8-ylmethyl]-phenyl}-4-iodo-benzenesulfonamide;
- *N*-{4-[3-butyl-1-(2-fluoro-benzyl)-2,6-dioxo-2,3,6,7-tetrahydro-1*H*-purin-8-ylmethyl]-phenyl}-2-chloro-benzenesulfonamide;
- *N*-{4-[3-butyl-1-(2-fluoro-benzyl)-2,6-dioxo-2,3,6,7-tetrahydro-1*H*-purin-8-ylmethyl]-phenyl}-3-chloro-benzenesulfonamide;
- *N*-{4-[3-butyl-1-(2-fluoro-benzyl)-2,6-dioxo-2,3,6,7-tetrahydro-1*H*-purin-8-ylmethyl]-phenyl}-4-fluoro-benzenesulfonamide;
- *N*-{4-[3-butyl-1-(2-fluoro-benzyl)-2,6-dioxo-2,3,6,7-tetrahydro-1*H*-purin-8-ylmethyl]-phenyl}-2-fluoro-benzenesulfonamide; and
- *N*-{4-[3-butyl-1-(2-fluoro-benzyl)-2,6-dioxo-2,3,6,7-tetrahydro-1*H*-purin-8-ylmethyl]-phenyl}-4-bromo-benzenesulfonamide.
- 31. (Currently amended) The compounds of formula IA according to claim 28 wherein the one substituent is lower alkyl or lower alkyl substituted by halogen.
- 32. (Currently amended) The A compound of formula IA according to claim 131 wherein the compound is selected from the group consisting of:
  - *N*-{4-[3-butyl-1-(2-fluoro-benzyl)-2,6-dioxo-2,3,6,7-tetrahydro-1*H*-purin-8-ylmethyl]-phenyl}-3-trifluoromethyl-benzenesulfonamide;
  - *N*-{4-[3-butyl-1-(2-fluoro-benzyl)-2,6-dioxo-2,3,6,7-tetrahydro-1*H*-purin-8-ylmethyl]-phenyl}-4-isopropyl-benzenesulfonamide;
  - *N*-{4-[3-butyl-1-(2-fluoro-benzyl)-2,6-dioxo-2,3,6,7-tetrahydro-1*H*-purin-8-ylmethyl]-phenyl}-3-methyl-benzenesulfonamide;
  - *N*-{4-[3-butyl-1-(2-fluoro-benzyl)-2,6-dioxo-2,3,6,7-tetrahydro-1*H*-purin-8-ylmethyl]-phenyl}-2-trifluoromethyl-benzenesulfonamide;
  - *N*-{4-[3-butyl-1-(2-fluoro-benzyl)-2,6-dioxo-2,3,6,7-tetrahydro-1*H*-purin-8-ylmethyl]-phenyl}-4-ethyl-benzenesulfonamide;
  - *N*-{4-[3-butyl-1-(2-fluoro-benzyl)-2,6-dioxo-2,3,6,7-tetrahydro-1*H*-purin-8-ylmethyl]-phenyl}-2-methyl-benzenesulfonamide; and

*N*-{4-[3-butyl-1-(2-fluoro-benzyl)-2,6-dioxo-2,3,6,7-tetrahydro-1*H*-purin-8-ylmethyl]-phenyl}-4-trifluoromethyl-benzenesulfonamide.

- 33. (Currently amended) The compounds of formula IA according to claim 28 wherein the one substituent is selected from the group consisting of nitro, alkoxy and alkoxy substituted by halogen.
- 34. (Currently amended) The A compound of claim IA according to claim 133 wherein the compound is selected from the group consisting of:

*N*-{4-[3-butyl-1-(2-fluoro-benzyl)-2,6-dioxo-2,3,6,7-tetrahydro-1*H*-purin-8-ylmethyl]-phenyl}-4-trifluoromethyl-benzenesulfonamide,

N-{4-[3-butyl-1-(2-fluoro-benzyl)-2,6-dioxo-2,3,6,7-tetrahydro-1H-purin-8-ylmethyl]-phenyl}-3-nitro-benzenesulfonamide,

*N*-{4-[3-butyl-1-(2-fluoro-benzyl)-2,6-dioxo-2,3,6,7-tetrahydro-1*H*-purin-8-ylmethyl]-phenyl}-4-methoxy-benzenesulfonamide, and

*N*-{4-[3-butyl-1-(2-fluoro-benzyl)-2,6-dioxo-2,3,6,7-tetrahydro-1*H*-purin-8-ylmethyl]-phenyl}-4-trifluoromethoxy-benzenesulfonamide.

- 35. (Currently amended) The compounds of formula IA according to claim 27 wherein the phenyl group has two substituents selected from the group consisting of lower alkyl, lower alkyl substituted by halogen, halogen, lower alkoxy, lower alkoxy substituted by halogen, nitro and acetamido.
- 36. (Currently amended) The compounds of formula IA according to claim 35 wherein the two substituents are each halogen.
- 37. (Currently amended) The compounds of formula IA according to claim 36 wherein the halogen substituents are chloro.

38. (Currently amended) The A compound of formula IA according to claim 137 wherein the compound is selected from the group consisting of:

*N*-{4-[3-butyl-1-(2-fluoro-benzyl)-2,6-dioxo-2,3,6,7-tetrahydro-1*H*-purin-8-ylmethyl]-phenyl}-2,4-dichloro-benzenesulfonamide;

*N*-{4-[3-butyl-1-(2-fluoro-benzyl)-2,6-dioxo-2,3,6,7-tetrahydro-1*H*-purin-8-ylmethyl]-phenyl}-2,5-dichloro-benzenesulfonamide;

*N*-{4-[3-butyl-1-(2-fluoro-benzyl)-2,6-dioxo-2,3,6,7-tetrahydro-1*H*-purin-8-ylmethyl]-phenyl}-2,6-dichloro-benzenesulfonamide;

*N*-{4-[3-butyl-1-(2-fluoro-benzyl)-2,6-dioxo-2,3,6,7-tetrahydro-1*H*-purin-8-ylmethyl]-phenyl}-2,3-dichloro-benzenesulfonamide;

*N*-{4-[3-butyl-1-(2-fluoro-benzyl)-2,6-dioxo-2,3,6,7-tetrahydro-1*H*-purin-8-ylmethyl]-phenyl}-3,5-dichloro-benzenesulfonamide; and

*N*-{4-[3-butyl-1-(2-fluoro-benzyl)-2,6-dioxo-2,3,6,7-tetrahydro-1*H*-purin-8-ylmethyl]-phenyl}-3,4-dichloro-benzenesulfonamide.

- 39. (Currently amended) The compounds of formula IA according to claim 36 wherein one of the halogen substituents is chloro and the other of the halogen substituents is fluoro.
- 40. (Currently amended) The A compound of formula IA according to claim 139 wherein the compound is selected from the group consisting of:

*N*-{4-[3-Butyl-1-(2-fluoro-benzyl)-2,6-dioxo-2,3,6,7-tetrahydro-1*H*-purin-8-ylmethyl]-phenyl}-2-chloro-4-fluoro-benzenesulfonamide; and

*N*-{4-[3-butyl-1-(2-fluoro-benzyl)-2,6-dioxo-2,3,6,7-tetrahydro-1*H*-purin-8-ylmethyl]-phenyl}-3-chloro-4-fluoro-benzenesulfonamide.

- 41. (Currently amended) The compounds of formula IA according to claim 36 wherein the two halogen substituents are fluoro.
- 42. (Currently amended) The A compound of formula IA according to claim 141 selected from the group consisting of:

*N*-{4-[3-butyl-1-(2-fluoro-benzyl)-2,6-dioxo-2,3,6,7-tetrahydro-1*H*-purin-8-ylmethyl]-phenyl}-2,4-difluoro-benzenesulfonamide;

*N*-{4-[3-butyl-1-(2-fluoro-benzyl)-2,6-dioxo-2,3,6,7-tetrahydro-1*H*-purin-8-ylmethyl]-phenyl}-2,6-difluoro-benzenesulfonamide; and

*N*-{4-[3-butyl-1-(2-fluoro-benzyl)-2,6-dioxo-2,3,6,7-tetrahydro-1*H*-purin-8-ylmethyl]-phenyl}-3,4-difluoro-benzenesulfonamide.

- 43. (Currently amended) The compounds of formula IA according to claim 35 wherein one of the substituents is halogen and the other of the substituents is lower alkyl.
- 44. (Currently amended) The A compound of formula IA according to claim 143 selected from the group consisting of:

*N*-{4-[3-butyl-1-(2-fluoro-benzyl)-2,6-dioxo-2,3,6,7-tetrahydro-1*H*-purin-8-ylmethyl]-phenyl}-3-chloro-4-methyl-benzenesulfonamide;

*N*-{4-[3-butyl-1-(2-fluoro-benzyl)-2,6-dioxo-2,3,6,7-tetrahydro-1*H*-purin-8-ylmethyl]-phenyl}-3-chloro-2-methyl-benzenesulfonamide;

*N*-{4-[3-butyl-1-(2-fluoro-benzyl)-2,6-dioxo-2,3,6,7-tetrahydro-1*H*-purin-8-ylmethyl]-phenyl}-2-chloro-6-methyl-benzenesulfonamide; and

*N*-{4-[3-butyl-1-(2-fluoro-benzyl)-2,6-dioxo-2,3,6,7-tetrahydro-1*H*-purin-8-ylmethyl]-phenyl}-5-fluoro-2-methyl-benzenesulfonamide.

- 45. (Currently amended) The compounds of formula IA according to claim 35 wherein the two substituents are selected from the group consisting of lower alkyl, lower alkoxyl and nitro.
- 46. (Currently amended) The A compound of formula IA according to claim 145 selected from the group consisting of:

*N*-{4-[3-butyl-1-(2-fluoro-benzyl)-2,6-dioxo-2,3,6,7-tetrahydro-1*H*-purin-8-ylmethyl]-phenyl}-2,5-dimethoxy-benzenesulfonamide;

*N*-{4-[3-butyl-1-(2-fluoro-benzyl)-2,6-dioxo-2,3,6,7-tetrahydro-1*H*-purin-8-ylmethyl]-phenyl}-2-methoxy-5-methyl-benzenesulfonamide;

*N*-{4-[3-butyl-1-(2-fluoro-benzyl)-2,6-dioxo-2,3,6,7-tetrahydro-1*H*-purin-8-ylmethyl]-phenyl}-3,4-dimethoxy-benzenesulfonamide;

*N*-{4-[3-butyl-1-(2-fluoro-benzyl)-2,6-dioxo-2,3,6,7-tetrahydro-1*H*-purin-8-ylmethyl]-phenyl}-2,5-dimethyl-benzenesulfonamide; and

N-{4-[3-Butyl-1-(2-fluoro-benzyl)-2,6-dioxo-2,3,6,7-tetrahydro-1H-purin-8-ylmethyl]-phenyl}-2-methyl-5-nitro-benzenesulfonamide.

- 47. (Currently amended) The compounds of formula IA according to claim 27 wherein the phenyl group has three substituents selected from the group consisting of lower alkyl, lower alkyl substituted by halogen, halogen, lower alkoxy, lower alkoxy substituted by halogen, nitro and acetamido.
- 48. (Currently amended) The compounds of formula IA according to claim 47 wherein the three substituents are selected from lower alkyl and halogen.
- 49. (Currently amended) The A compound of formula IA according to claim 148 wherein the compound is selected from the group consisting of:

*N*-{4-[3-butyl-1-(2-fluoro-benzyl)-2,6-dioxo-2,3,6,7-tetrahydro-1*H*-purin-8-ylmethyl]-phenyl}-2,4,6-trimethyl-benzenesulfonamide;

*N*-{4-[3-butyl-1-(2-fluoro-benzyl)-2,6-dioxo-2,3,6,7-tetrahydro-1*H*-purin-8-ylmethyl]-phenyl}-4-chloro-2,5-dimethyl-benzenesulfonamide[,];

*N*-{4-[3-butyl-1-(2-fluoro-benzyl)-2,6-dioxo-2,3,6,7-tetrahydro-1*H*-purin-8-ylmethyl]-phenyl}-2,4-dichloro-6-methyl-benzenesulfonamide; and

N-{4-[3-butyl-1-(2-fluoro-benzyl)-2,6-dioxo-2,3,6,7-tetrahydro-1H-purin-8-ylmethyl]-phenyl}-C-phenyl-methanesulfonamide.

50. (Currently amended) The compounds of formula IA according to claim 27 wherein the phenyl group has four substituents selected from the group consisting of lower alkyl, lower

alkyl substituted by halogen, halogen, lower alkoxy, lower alkoxy substituted by halogen, nitro and acetamido.

- 51. (Currently amended) The compounds of formula IA according to claim 50 wherein the four substituents are selected from the group consisting of lower alkyl and lower alkoxy.
- 52. (Currently amended) The A compound of formula IA according to claim 151 selected from the group consisting of:

*N*-{4-[3-butyl-1-(2-fluoro-benzyl)-2,6-dioxo-2,3,6,7-tetrahydro-1*H*-purin-8-ylmethyl]-phenyl}-2,3,5,6-tetramethyl-benzenesulfonamide; and

N-{4-[3-butyl-1-(2-fluoro-benzyl)-2,6-dioxo-2,3,6,7-tetrahydro-1H-purin-8-ylmethyl]-phenyl}-4-methoxy-2,3,6-trimethyl-benzenesulfonamide.

53. (Currently amended) The compounds of formula IA according to claim 10 wherein R<sup>3</sup> is:

- 54. (Currently amended) The compounds of formula IA according to claim 53 wherein R<sup>6</sup> is a 5-membered aromatic heterocyclic ring with one or two heteroatoms wherein a first heteroatom is N and a second heteroatom is selected from the group consisting of N and S[,]; the 5-membered heterocyclic ring being unsubstituted or substituted by at least one substituent selected from the group consisting of lower alkyl, halogen, carboxy lower alkyl, amino, alkyl amino and acetamido.
- 55. (Currently amended) The A compound of formula IA according to claim 154 wherein the compound is selected from the group consisting of:

4-[3-butyl-1-(2-fluoro-benzyl)-2,6-dioxo-2,3,6,7-tetrahydro-1*H*-purin-8-ylmethyl]-*N*-(1,3,5-trimethyl-1*H*-pyrazol-4-yl)-benzenesulfonamide; and 4-[3-butyl-1-(2-fluoro-benzyl)-2,6-dioxo-2,3,6,7-tetrahydro-1*H*-purin-8-ylmethyl]-*N*-thiazol-2-yl-benzenesulfonamide.

- 56. (Currently amended) The compounds of formula IA according to claim 53 wherein R<sup>6</sup> is a 6-membered aromatic heterocyclic ring with one or two N heteroatoms, the 6-membered heterocyclic ring being unsubstituted or substituted by at least one substituent selected from the group consisting of lower alkyl, halogen, carboxy lower alkyl, amino, alkyl amino and acetamido.
- 57. (Currently amended) The A compound of formula IA according to claim 156 wherein the compound is selected from the group consisting of:

4-[3-butyl-1-(2-fluoro-benzyl)-2,6-dioxo-2,3,6,7-tetrahydro-1*H*-purin-8-ylmethyl]-*N*-pyridin-2-yl-benzenesulfonamide;

4-[3-butyl-1-(2-fluoro-benzyl)-2,6-dioxo-2,3,6,7-tetrahydro-1*H*-purin-8-ylmethyl]-*N*-pyridin-3-yl-benzenesulfonamide;

4-[3-butyl-1-(2-fluoro-benzyl)-2,6-dioxo-2,3,6,7-tetrahydro-1*H*-purin-8-ylmethyl]-*N*-pyridin-4-yl-benzenesulfonamide;

4-[3-butyl-1-(2-fluoro-benzyl)-2,6-dioxo-2,3,6,7-tetrahydro-1*H*-purin-8-ylmethyl]-*N*-pyrimidin-2-yl-benzenesulfonamide; and

4-[3-butyl-1-(2-fluoro-benzyl)-2,6-dioxo-2,3,6,7-tetrahydro-1*H*-purin-8-ylmethyl]-*N*-(1,3,5-trimethyl-1*H*-pyrazol-4-yl)-benzenesulfonamide.

58. (Currently amended) The compounds of formula IA according to claim 10 wherein  $R^3$  is:

$$\begin{array}{c|c}
R^4 & O \\
 & | & | \\
 & N - S - R^5
\end{array}$$
[,]:

R<sup>4</sup> is H[,]; and R<sup>5</sup> is a 5-membered aromatic heterocyclic ring with one or two heteroatoms wherein a first heteroatom is N and a second heteroatom is selected from the group consisting of N and S, the 5-membered heterocyclic ring being unsubstituted or substituted by at least one substituent selected from the group consisting of lower alkyl, halogen, carboxy lower alkyl, amino, alkyl amino and acetamido.

- 59. (Currently amended) The A compound of formula IA according to claim 158 wherein the compound is 5-chloro-1,3-dimethyl-1*H*-pyrazole-4-sulfonic acid {6-[3-cyclobutylmethyl-1-(2-fluoro-benzyl)-2,6-dioxo-2,3,6,7-tetrahydro-1*H*-purin-8-ylmethyl]-pyridin-3-yl}-amide.
- 60. (Currently amended) The compounds of formula IA according to claim 8 wherein  $R^2$  is lower alkyl substituted by cyclobutyl and  $R^3$  is:

$$\begin{array}{c|cccc}
R^4 & 0 \\
N & -S - R^5 \\
\end{array}$$

- 61. (Currently amended) The A compound of formula IA according to claim 160 wherein the compound is 5-chloro-1,3-dimethyl-1*H*-pyrazole-4-sulfonic acid {6-[3-cyclobutylmethyl-1-(2-fluoro-benzyl)-2,6-dioxo-2,3,6,7-tetrahydro-1*H*-purin-8-ylmethyl]-pyridin-3-yl}-amide.
- 62. (Currently amended) The compounds of formula 1 according to claim 8 with the formula:

63. (Currently amended) The compounds of formula IB according to claim 62 wherein  $R^3$  is:

- 64. (Currently amended) The compounds of formula IB according to claim 63 wherein  $R^4$  is H.
- 65. (Currently amended) The compounds of formula IB according to claim 64 wherein R<sup>5</sup> is a 5-membered heteroaromatic ring having two heteroatoms wherein a first heteroatom is N and a second heteroatom is independently selected from the group consisting of N, O and S, the 5-membered heteroaromatic ring being unsubstituted or substituted by at least one substituent selected from the group consisting of lower alkyl, halogen, carboxy lower alkyl, amino, alkyl amino and acetamido.
- 66. (Currently amended) The compounds of formula IB according to claim 65 wherein the 5-membered heteroaromatic ring has two lower alkyl substituents.
- 67. (Currently amended) The A compound of formula IB-according to claim 166 wherein the compound is selected from the group consisting of:

1,2-dimethyl-1*H*-imidazole-4-sulfonic acid {4-[3-cyclopropylmethyl-1-(2-fluoro-benzyl)-

2,6-dioxo-2,3,6,7-tetrahydro-1*H*-purin-8-ylmethyl]-phenyl}-amide;

3,5-dimethyl-isoxazole-4-sulfonic acid  $\{4-[3-cyclopropylmethyl-1-(2-fluoro-benzyl)-2,6-dioxo-2,3,6,7-tetrahydro-1<math>H$ -purin-8-ylmethyl]-phenyl $\}$ -amide; and

 $1, 3-dimethyl-1 \\ H-pyrazole-4-sulfonic\ acid\ \{4-[3-cyclopropylmethyl-1-(2-fluoro-benzyl)-1, 3-dimethyl-1\}$ 

2,6-dioxo-2,3,6,7-tetrahydro-1*H*-purin-8-ylmethyl]-phenyl}-amide.

68. (Currently amended) The A compound of formula I according to claim 1 wherein the compound is 1,2-dimethyl-1*H*-imidazole-4-sulfonic acid {4-[3-cyclopropylmethyl-1-(2-fluorobenzyl)-2,6-dioxo-2,3,6,7-tetrahydro-1*H*-purin-8-ylmethyl]-phenyl}-amide.

- 69. (Currently amended) The A compound of formula I according to claim 1 wherein the compound is 3,5-dimethyl-isoxazole-4-sulfonic acid {4-[3-cyclopropylmethyl-1-(2-fluorobenzyl)-2,6-dioxo-2,3,6,7-tetrahydro-1*H*-purin-8-ylmethyl]-phenyl}-amide.
- 70. (Currently amended) The A compound of formula I according to claim 1 wherein the compound is 1,3-dimethyl-1*H*-pyrazole-4-sulfonic acid {4-[3-cyclopropylmethyl-1-(2-fluorobenzyl)-2,6-dioxo-2,3,6,7-tetrahydro-1*H*-purin-8-ylmethyl]-phenyl}-amide.
- 71. (Currently amended) The compounds of formula IB according to claim 65 wherein the 5-membered heteroaromatic ring has one lower alkyl substituent.
- 72. (Currently amended) The A compound of formula IB according to claim 171 wherein the compound is selected from the group consisting of:

1-methyl-1*H*-pyrazole-4-sulfonic acid {4-[3-cyclopropylmethyl-1-(2-fluoro-benzyl)-2,6-dioxo-2,3,6,7-tetrahydro-1*H*-purin-8-ylmethyl]-phenyl}-amide, and 1-methyl-1*H*-imidazole-4-sulfonic acid {4-[3-cyclopropylmethyl-1-(2-fluoro-benzyl)-2,6-dioxo-2,3,6,7-tetrahydro-1*H*-purin-8-ylmethyl]-phenyl}-amide.

- 73. (Currently amended) The compounds of formula IB according to claim 65 wherein the 5-membered heteroaromatic ring has one lower alkyl substituent and one amino substituent.
- 74. (Currently amended) The A compound of formula IB according to claim 173 wherein the compound is 2-amino-4-methyl-thiazole-5-sulfonic acid {4-[3-cyclopropylmethyl-1-(2-fluoro-benzyl)-2,6-dioxo-2,3,6,7-tetrahydro-1*H*-purin-8-ylmethyl]-phenyl}-amide trifluoro-acetic acid salt.
- 75. (Currently amended) The compounds of formula IB according to claim 65 wherein the 5-membered heteroaromatic ring has one lower alkyl substituent and one acetamido substituent.

- 76. (Currently amended) The A compound of formula IB according to claim 175 wherein the compound is N-(5-{4-[3-cyclopropylmethyl-1-(2-fluoro-benzyl)-2,6-dioxo-2,3,6,7-tetrahydro-1*H*-purin-8-ylmethyl]-phenylsulfamoyl}-4-methyl-thiazol-2-yl)-acetamide.
- 77. (Currently amended) The compounds of formula IB according to claim 65 wherein the 5-membered heteroaromatic ring has one lower alkyl substituent and one halogen substituent.
- 78. (Currently amended) The A compound of formula IB according to claim 177 wherein the compound is 5-chloro-1,3-dimethyl-1*H*-pyrazole-4-sulfonic acid {4-[3-cyclopropylmethyl-1-(2-fluoro-benzyl)-2,6-dioxo-2,3,6,7-tetrahydro-1*H*-purin-8-ylmethyl]-phenyl}-amide.
- 79. (Currently amended) The compounds of formula IB according to claim 65 wherein the 5-membered heteroaromatic ring has three substituents.
- 80. (Currently amended) The A compound of formula IB-according to-claim 179 wherein the compound is 5-chloro-1,3-dimethyl-1*H*-pyrazole-4-sulfonic acid {3-[3-cyclopropylmethyl-1-(2-fluoro-benzyl)-2,6-dioxo-2,3,6,7-tetrahydro-1*H*-purin-8-ylmethyl]-phenyl}-amide.
- 81. (Currently amended) The compounds of formula IB according to claim 64 wherein R<sup>5</sup> is phenyl substituted by at least one substituent selected from the group consisting of lower alkyl, lower alkyl substituted by halogen, halogen, lower alkoxy, lower alkoxy substituted by halogen, nitro and acetamido.
- 82. (Currently amended) The compounds of formula IB according to claim 81 wherein the phenyl group is substituted by one halogen.
- 83. (Currently amended) The  $\underline{A}$  compound of formula IB according to claim  $\underline{182}$  wherein the compound is N-{4-[3-cyclopropylmethyl-1-(2-fluoro-benzyl)-2,6-dioxo-2,3,6,7-tetrahydro-1H-purin-8-ylmethyl]-phenyl}-3-fluoro-benzenesulfonamide.

84. (Currently amended) The compounds of formula IB according to claim 81 wherein the phenyl is substituted by one alkoxy.

- 85. (Currently amended) The A compound of formula IB according to claim 184 wherein the compound is *N*-{4-[3-cyclopropylmethyl-1-(2-fluoro-benzyl)-2,6-dioxo-2,3,6,7-tetrahydro-1*H*-purin-8-ylmethyl]-phenyl}-3-methoxy-benzenesulfonamide.
- 86. (Currently amended) The compounds of formula IB according to claim 81 wherein the phenyl is substituted by one acetamido.
- 87. (Currently amended) The A compound of formula IB according to claim 186 wherein the compound is N-(4-{4-[3-cyclopropylmethyl-1-(2-fluoro-benzyl)-2,6-dioxo-2,3,6,7-tetrahydro-1*H*-purin-8-ylmethyl]-phenylsulfamoyl}-phenyl)-acetamide.
- 88. (Currently amended) The compounds of formula IB according to claim 64 wherein R<sup>5</sup> is a 6-membered heteroaromatic ring having one N, the 6-membered heteroaromatic ring being unsubstituted or substituted by at least one substituent selected from the group consisting of lower alkyl, halogen, carboxy lower alkyl, amino, alkyl amino and acetamido.
- 89. (Currently amended) The compounds of formula IB according to claim 88 wherein the heteroaromatic ring is unsubstituted.
- 90. (Currently amended) The A compound of formula IB according to claim 189 wherein the compound is pyridine-3-sulfonic acid {4-[3-cyclopropylmethyl-1-(2-fluoro-benzyl)-2,6-dioxo-2,3,6,7-tetrahydro-1*H*-purin-8-ylmethyl]-phenyl}-amide trifluoro-acetic acid salt.
- 91. (Currently amended) The compounds of formula IB according to claim 88 wherein the 6-membered heteroaromatic ring has one substituent.

92. (Currently amended) The compounds of formula IB according to claim 88 wherein 6-membered heteroaromatic ring is substituted by two halogen substituents.

- 93. (Currently amended) The A compound of formula IB according to claim 192 wherein the compound is 5-bromo-6-chloro-pyridine-3-sulfonic acid {4-[3-cyclopropylmethyl-1-(2-fluoro-benzyl)-2,6-dioxo-2,3,6,7-tetrahydro-1*H*-purin-8-ylmethyl]-phenyl}-amide.
- 94. (Currently amended) The compounds of formula IB according to claim 64 wherein  $R^5$  is lower alkyl.
- 95. (Currently amended) The A compound of formula IB according to claim 194 wherein the compound is *N*-{4-[3-cyclopropylmethyl-1-(2-fluoro-benzyl)-2,6-dioxo-2,3,6,7-tetrahydro-1*H*-purin-8-ylmethyl]-phenyl}-methanesulfonamide.
- 96. (Currently amended) The compounds of formula IB according to claim 64 wherein R<sup>5</sup> is amino lower alkyl.
- 97. (Currently amended) The compound of formula IB according to claim 96 wherein the compound is *N*'\_-{4-[3-cyclopropylmethyl-1-(2-fluoro-benzyl)-2,6-dioxo-2,3,6,7-tetrahydro-1*H*-purin-8-ylmethyl]-phenyl}-*N*,*N*-dimethylsulfamide.
- 98. (Currently amended) The compounds of formula IB according to claim 64 wherein  $R^5$  is:



wherein Ar is selected from the group consisting of a 5-membered heteroaromatic ring fused to the 6-membered ring, having one, two, or three heteroatoms, and wherein a first heteroatom is N, a second heteroatom is N and a third heteroatom is selected from the group consisting of O and

S[,]; the 5-membered heteroaromatic ring being unsubstituted or substituted by at least one substituent selected from the group consisting of lower alkyl, halogen, carboxy lower alkyl, amino, alkyl amino and acetamido.

- 99. (Currently amended) The A compound of formula IB according to claim 198 wherein the compound is quinoline-8-sulfonic acid {4-[3-cyclopropylmethyl-1-(2-fluoro-benzyl)-2,6-dioxo-2,3,6,7-tetrahydro-1*H*-purin-8-ylmethyl]-phenyl}-amide.
- 100. (Currently amended) The compounds of formula IB according to claim 63 wherein R<sup>4</sup> is lower alkyl.
- 101. (Currently amended) The A compound of formula IB-according to-claim 1100 wherein the compound is selected from the group consisting of:
  - 1,3-dimethyl-1*H*-pyrazole-4-sulfonic acid {4-[3-cyclopropylmethyl-1-(2-fluoro-benzyl)-2,6-dioxo-2,3,6,7-tetrahydro-1*H*-purin-8-ylmethyl]-phenyl}-methyl-amide; and 5-chloro-1,3-dimethyl-1*H*-pyrazole-4-sulfonic acid {4-[3-cyclopropylmethyl-1-(2-fluoro-benzyl)-2,6-dioxo-2,3,6,7-tetrahydro-1*H*-purin-8-ylmethyl]-phenyl}-methyl-amide.
- 102. (Original) A pharmaceutical composition comprising a compound of formula I according to claim 1 or a pharmaceutically acceptable salt or prodrug thereof, and a pharmaceutically acceptable excipient.
- 103. (Original) A method of treatment for type 2 diabetes comprising administering a therapeutically effective amount of a compound of formula I according to claim 1 or a pharmaceutically acceptable salt or prodrug thereof, to a patient in need of such treatment.